

**Tennessee Valley Authority
Integrated Resource Plan Stakeholder Review Group
Working Session**

MEETING MINUTES

**February 17, 2010
Knoxville, Tennessee**

Members (or alternate) present:

Randy McAdams, Facilitator, ScottMadden
Katie High for Jan Simek, University of Tennessee
Lance Brown, Partnership for Affordable Clean Energy
Dana Christensen, Oak Ridge National Laboratories
Stephen Smith, Southern Alliance for Clean Energy
Louise Gorenflo, Sierra Club
Jack Simmons, Tennessee Valley Public Power Association
Richard Holland, Tennessee Paper Council
Hank List, Commonwealth of Kentucky
David McKinney, Tennessee Wildlife Resource Agency
Lloyd Webb, Tennessee Valley Industrial Committee
Deborah Woolley, Tennessee Chamber of Commerce and Industry

Members absent:

Ryan Gooch, State of Tennessee
George Kitchens, Joe Wheeler Electric Membership Corporation
David Reister, Environmental Stakeholder
Jerry Paul, Howard Baker Center for Public Policy

Guests:

Brian Paddock, Sierra Club
Steve Adams, Tennessee Valley Public Power Association
Tom King, Oak Ridge National Laboratories
Josh Veazey, Partnership for Affordable Clean Energy
Sam Gomberg, Southern Alliance for Clean Energy

TVA:

Van Wardlaw, Joe Hoagland, Randy Johnson, Gary Brinkworth, Belinda Thornton, Alisha Mulkey, Chuck Nicholson, Patty West, Rebecca Tolene, Carrie Meade, B. J. Gatten, Beth Keel, Beth Yetter, and Trudi Pullin

- I. Randy McAdams welcomed the Stakeholder Review Group (SRG) and thanked the members for their willingness to participate. Katie High is representing Dr. Jan Simek, The University of Tennessee. Van Wardlaw, Executive Vice President, Strategy and Business Planning, TVA, will be a visible source for the SRG as he has assumed a new role with TVA planning and as the lead executive on the IRP.
- II. To remind the group, the SRG's purpose is to:
 1. Provide TVA with in-depth and ongoing discussions and input from different stakeholder viewpoints.

2. Serve as a source of information and as a coordination mechanism and as professional review group.
3. Build efficiency into the Integrated Resource Plan (IRP) process by providing real-time, public input to IRP issues and processes.
4. Validate the various steps in the IRP process.

To clarify the types of meetings the SRG previously agreed upon:

- Working sessions are regular meetings that are not open to the general public
- Workshops provide more in depth information on specific topics and are requested by the SRG and supported by a majority vote
- Public comment/listening sessions are to receive input from the public on specific topics. There is a public briefing tonight.

- III. After a review of the planned agenda, Joe Hoagland spoke of TVA's restructuring activities to increase accountability and effectiveness of TVA organizations. Joe will support the IRP as Vice President, Office of the CEO, and will keep the CEO abreast of IRP activities. Van's group will lead the IRP effort and hold those resources in his group.

Van Wardlaw gave his appreciation of the opportunity to be a part of the IRP SRG and feels it's important for him to listen to the group. His organization combines all the strategy, planning, and forecasting within one TVA group.

A request from the SRG is to provide a TVA organizational chart.

- IV. Renewables Update - Belinda Thornton. TVA has announced six renewable contracts in place with additional contracts under negotiation. The contracts are subject to having an established firm transmission path and environmental reviews. With this contract, TVA has added up to 1,380 megawatts of new renewable or clean energy resources to the generating system.

- V. Review of Overall IRP Process/Current Position - Randy McAdams. The IRP process can be summarized into six high-level steps:

1. Scope - identify public issues
2. Develop input and framework - identify possible future conditions, develop planning strategies, and validate data
3. Analyze and evaluate - identify least-cost plans for the future
4. Initial results - review draft IRP
5. Incorporate input - revise and refresh key inputs; update analysis and evaluate results
6. Identify preferred plan - select a preferred plan and present to the TVA Board for approval

TVA's reorganization and the addition of four Board members could change the IRP schedule. *A suggestion was made to invite the Board members to an IRP working session.*

- VI. Review of Scenarios/Worlds - Gary Brinkworth. Scenarios are developed to gather key uncertainties to define plausible future outcomes. The six worlds and their

characteristics are:

1. The economy recovers dramatically
2. Environmental focus is a national priority
3. We experience prolonged economic malaise
4. There is a game-changing technology
5. We focus on energy independence
6. Carbon regulation creates an economic downturn

It was suggested we consider changing Scenario 5's title from "Energy Independence" to "Reduce dependence on foreign energy sources." Also suggested was to include a column or information sheet to identify where an uncertainty comes from: a model, an estimate, or both.

Other suggestions included considering the impact of shale gas and other unconventional natural gas sources to natural gas supply; widening the bounds of construction cost escalation; considering the impact of the possibility of diminished oil supply before 2030; including varied methods of allowance distribution for allocating CO2 allowances; and properly consider how TVA will fund future capital projects.

- VII. Busbar Screening Results and Supply-Side Technology Options - Gary Brinkworth. Busbar costs allow for a comparison of power generation technologies of unequal characteristics and cost components. There are many technologies to consider and cost, application and maturity vary across the technologies. Geography and proximity to the supply source are also major factors. The busbar calculations compare levelized costs by duty cycle or type. The planning models use options from the lowest costs in each duty cycle. The IRP resource options include demand-side options, supply-side options, and purchase power agreements. It was suggested that wind and landfill gas be included in the initial database of supply options within busbar screening.
- VIII. Information Sharing Protocol - Randy McAdams. TVA's goal is to provide the necessary information to help the SRG independently evaluate the IRP process and has confidentiality agreements in place with many of the stakeholders regarding capital costs, price forecasts, and independent studies. Some information may be considered proprietary, a potential safety risk, or not relevant to the IRP process. All requests for information are captured, and a tracking sheet of questions and actions items is maintained on the SRG SharePoint site.
- IX. A motion was made for the SRG to request a workshop on modeling. After discussion and vote, the SRG voted down the request at this time.
- X. A handout consisting of action items from previous SRG Working Sessions, Workshops, and Other Correspondence was distributed and discussed.
- XI. A public meeting/listening session is scheduled for the evening of February 17. The agenda includes webinar instructions, the IRP process review, an overview of resource options, and an overview of the scenarios. A question and answer period will follow the presentation.

The meeting was adjourned.